

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

1-15. **(Cancelled)**

16. **(Currently Amended)** A glass substrate for a magnetic recording medium formed to have a disc shape and including ridge shaped textures extending along concentric circles on a main surface,

wherein the textures have a width W that is between 10 and 200 nm at a reference plane obtained by measuring a 10 μ m square range with an atomic force microscope, the textures have a height H that is between 2 and 10 nm, and the textures have a ratio (Rp/RMs) of a maximum mountain height with respect to a root mean square roughness that is less than or equal to 15,

wherein when the textures are cut along a plane parallel to the main surface in the 10 μ m square measurement range of the atomic force microscope, the percentage of the area of the textures in the cut plane with respect to the entire area of the measurement range is defined as a bearing ratio (BR), the height of the textures when the bearing ratio is 50% is defined as a reference height, and the height of the textures from the reference height in a plurality of bearing ratios is defined as a bearing height (BH), a difference between the bearing height (BH) when the bearing ratio (BR) is 0.4% and the bearing height (BH) when the bearing ratio (BR) is 1.0% The glass substrate for a magnetic recording medium according to claim 1, wherein the difference between the bearing height when the bearing ratio is 0.4% and 1.0% is between 0.15 nm and 0.18 nm for the textures.

17. **(Currently Amended)** A glass substrate for a magnetic recording medium formed to have a disc shape and including ridge shaped textures extending along concentric circles on a main surface,

wherein the textures have a width W that is between 10 and 200 nm at a reference plane obtained by measuring a 10 μ m square range with an atomic force microscope, the textures have a height H that is between 2 and 10 nm, and the textures have a ratio (Rp/RMs) of a maximum mountain height with respect to a root mean square roughness that is less than or equal to 15,

wherein when the textures are cut along a plane parallel to the main surface in the 10 μ m square measurement range of the atomic force microscope, the percentage of the area of the textures in the cut plane with respect to the entire area of the measurement range is defined as a bearing ratio (BR), the height of the textures when the bearing ratio is 50% is defined as a reference height, and the height of the textures from the reference height in a plurality of bearing ratios is defined as a bearing height (BH), a difference between the bearing height (BH) when the bearing ratio (BR) is 0.01% and the bearing height (BH) when the bearing ratio (BR) is 0.4% The glass substrate for a magnetic recording medium according to claim 1, wherein the difference between the bearing height when the bearing ratio is 0.01% and 0.4% is between 0.18 nm and 0.45 nm for the textures.

18. **(Currently Amended)** A glass substrate for a magnetic recording medium formed to have a disc shape and including ridge shaped textures extending along concentric circles on a main surface,

wherein the textures have a width W that is between 10 and 200 nm at a reference plane obtained by measuring a 10 μ m square range with an atomic force microscope, the textures have a height H that is between 2 and 10 nm, and the textures have a ratio (Rp/RMs) of a maximum mountain height with respect to a root mean square roughness that is less than or equal to 15,

wherein when the textures are cut along a plane parallel to the main surface in the 10 μ m square measurement range of the atomic force microscope, the percentage of the area of the textures in the cut plane with respect to the entire area of the measurement range is defined as a bearing ratio (BR), the height of the textures when the bearing ratio is 50% is defined as a reference height, and the height of the textures from the reference height in a plurality of bearing ratios is defined as a bearing height (BH), wherein at least one of a difference between the bearing height (BH) when the bearing ratio (BR) is 0.4% and the bearing height (BH) when the bearing ratio (BR) is 1.0% is between 0.15 and 0.18 nm for the textures ~~The glass substrate for a magnetic recording medium according to claim 5, wherein at least one of the difference between the bearing height when the bearing ratio is 0.4% and 1.0% is between 0.15 nm and 0.18 nm and the difference between the bearing height when the bearing ratio is 0.01% and the bearing ratio 0.4% is between 0.18 nm and 0.45 nm for the textures.~~

19. **(Currently Amended)** A glass substrate for a magnetic recording medium formed to have a disc shape and including ridge shaped textures extending along concentric circles on a main surface,

wherein the textures have a width W that is between 10 and 200 nm at a reference plane obtained by measuring a 10 μ m square range with an atomic force microscope, the textures have a height H that is between 2 and 10 nm, and the textures have a ratio (Rp/RMs) of a maximum mountain height with respect to a root mean square roughness that is less than or equal to 15,

wherein when the textures are cut along a plane parallel to the main surface in the 10 μ m square measurement range of the atomic force microscope, the percentage of the area of the textures in the cut plane with respect to the entire area of the measurement range is defined as a bearing ratio (BR), the height of the textures when the bearing ratio is 50% is defined as a reference height, and the height of the textures from the reference height in a plurality of bearing ratios is defined as a bearing height (BH), wherein at least one of a difference between the bearing height (BH) when the bearing ratio (BR) is 0.4% and the bearing height (BH) when the bearing ratio (BR) is 1.0% is between 0.15 and 0.18 nm for the textures and the difference between the bearing height (BH) when the bearing ratio (BR) is 0.01% and the bearing height (BH) when the bearing ratio (BR) is 0.4% The glass substrate for a magnetic recording medium according to claim 6, wherein at least one of the difference between the bearing height when the bearing ratio is 0.4% and 1.0% is between 0.15 nm and 0.18 nm and the difference between the bearing height when the bearing ratio is 0.01% and 0.4% is between 0.18 nm and 0.45 nm for the textures.

20. **(Currently Amended)** A glass substrate for a magnetic recording medium formed to have a disc shape and including ridge shaped textures extending along concentric circles on a main surface,

wherein the textures have a width W that is between 10 and 200 nm at a reference plane obtained by measuring a 10 μ m square range with an atomic force microscope, the textures have a height H that is between 2 and 10 nm, and the textures have a ratio (Rp/RMs) of a maximum mountain height with respect to a root mean square roughness that is less than or equal to 15,

wherein when the textures are cut along a plane parallel to the main surface in the 10 μ m square measurement range of the atomic force microscope, the percentage of the area of the textures in the cut plane with respect to the entire area of the measurement range is defined as a bearing ratio (BR), the height of the textures when the bearing ratio is 50% is defined as a reference height, and the height of the textures from the reference height in a plurality of bearing ratios is defined as a bearing height (BH), the difference between the bearing height (BH) when the bearing ratio (BR) is 0.4% and the bearing height (BH) when the bearing ratio (BR) is 1.0% is between 0.15 and 0.20 nm for the textures. The glass substrate for a magnetic recording medium according to claim 5, wherein the a ratio (Hv1/Hc2) of a coercive force Hc1 in a circumferential direction with respect to a coercive force Hc2 in a radial direction is greater than 1.1 and less than or equal to 1.3.

21. **(Currently Amended)** A glass substrate for a magnetic recording medium formed to have a disc shape and including ridge shaped textures extending along concentric circles on a main surface,

wherein the textures have a width W that is between 10 and 200 nm at a reference plane obtained by measuring a 10 μ m square range with an atomic force microscope, the textures have a height H that is between 2 and 10 nm, and the textures have a ratio (Rp/RMs) of a maximum mountain height with respect to a root mean square roughness that is less than or equal to 15,

wherein when the textures are cut along a plane parallel to the main surface in the 10 μ m square measurement range of the atomic force microscope, the percentage of the area of the textures in the cut plane with respect to the entire area of the measurement range is defined as a bearing ratio (BR), the height of the textures when the bearing ratio is 50% is defined as a reference height, and the height of the textures from the reference height in a plurality of bearing ratios is defined as a bearing height (BH), the difference between the bearing height (BH) when the bearing ratio (BR) is 0.01% and the bearing height (BH) when the bearing ratio (BR) is 0.4% is between 0.2 and 0.7 nm, and the difference between the bearing height (BH) when the bearing ratio (BR) is 0.4% and the bearing height (BH) when the bearing ratio (BR) is 1.0% is between 0.17 and 0.20 nm for the textures ~~The glass substrate for a magnetic recording medium according to claim 6, wherein the a ratio (Hv1/Hc2) of a coercive force Hc1 in a circumferential direction with respect to a coercive force Hc2 in a radial direction is greater than 1.1 and less than or equal to 1.3.~~